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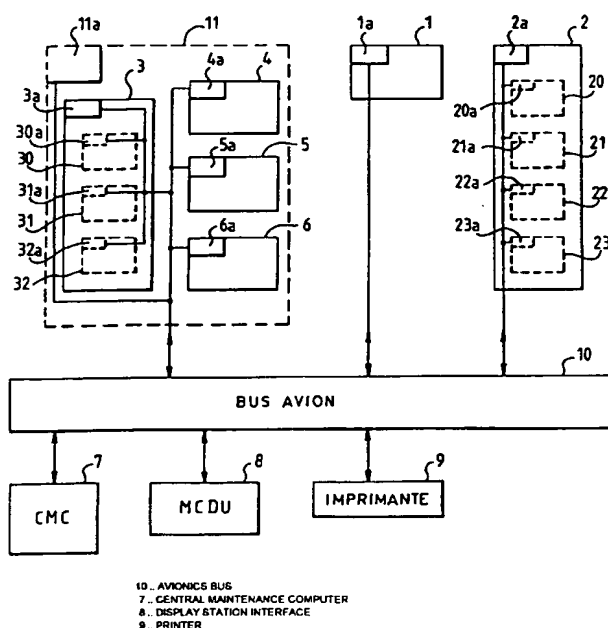
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(54) Title: MAINTENANCE SYSTEM FOR AN EQUIPMENT SET

(54) Titre : SYSTEME DE MAINTENANCE POUR UN ENSEMBLE D'EQUIPEMENTS



(57) Abstract: The invention concerns the maintenance of a fast setting and removal equipment set (1-6, 11), substitutable by standard replacements, provided with individual electronic circuits (1a, 6a, 20a-23a, 30a-32a, 11a) monitoring proper functioning providing, at their level, a BITE (Built-In Test Equipment) function for failure testing and diagnosing and for transmitting a failure message by data transmission to a central maintenance computer (7) itself preparing a report on the global operating condition of the equipment set. More particularly, the invention concerns the hardware parts of the electronic circuits monitoring the proper functioning which are integral with the equipment (1-6) or part of the equipment (20-23, 30-32) and which are provided with a non-volatile storage (405) and means for detecting, selecting and recording (403, 413, 423) in their non-volatile storage units (405), the report prepared by the central maintenance computer (7). Since those hardware parts of the circuits monitoring the proper functioning track the problems of parts of equipment or equipment with which they are integral, they provide on a permanent basis, in a repair centre, together with a component removed for repair, the latest report on the global operating condition of the equipment set which is often the

cause of removal, thereby facilitating the establishment of a repair diagnosis.

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ABSTRACT

MAINTENANCE SYSTEM FOR A SET OF EQUIPMENT

The invention relates to the maintenance of a rapidly installable and rapidly removable set of equipment (1-6, 11) which can be replaced by standard exchanges, furnished with individual electronic circuits for monitoring proper operation (1a-6a, 20a-23a, 30a-32a, 11a) assuming, at their level, a BITE function (Build [sic] In Test Equipment) for testing, for fault diagnosis and for issuing fault messages sent by data transmission to a central maintenance computer (7) itself formulating a report regarding the overall state of operation of the set of equipment. It relates more especially to the hardware parts of the electronic circuits for monitoring proper operation which are integral with the equipment (1-6) or with equipment parts (20-23, 30-32) and which are furnished with a nonvolatile memory (405) and with means of detection, selection and capture (403, 413, 423) into their nonvolatile memories (405), of the report formulated by the central maintenance computer (7). Since these hardware parts of circuits for monitoring proper operation track the tribulations of the equipment parts or pieces of equipment with which they are integral, they make it possible for the latest report regarding the overall state of operation of the set of equipment often causing the removal, to be always available, in a repair center, with an item removed for repair, thereby facilitating the drawing up of a repair diagnosis.

Fig. 1